



Research shows that alcohol use and misuse among women are increasing.<sup>1-2</sup> While alcohol misuse by anyone presents serious public health concerns, women who drink have a higher risk of certain alcohol-related problems compared to men.<sup>3</sup> It is important that women be aware of these health risks and of the U.S. dietary guidelines, which recommend no more than 1 drink per day for women, as they make informed decisions about alcohol use.<sup>4</sup>



## Why Do Women Face Higher Risks?

Studies show that women start to have alcohol-related problems sooner and at lower drinking levels than men and for multiple reasons.<sup>3</sup> On average, women weigh less than men. Also, alcohol resides predominantly in body water, and pound for pound, women have less water in their bodies than men. This means that after a woman and a man of the same weight drink the same amount of alcohol, the woman's blood alcohol concentration (BAC, the amount of alcohol in the blood) will tend to be higher, putting her at greater risk for harm. Other biological differences may contribute as well.

## What Are the Long-Term Health Risks?

### Alcohol Use Disorder

Alcohol use disorder (AUD) is a chronic relapsing brain disorder characterized by an impaired ability to stop or control alcohol use despite adverse social, occupational, or health consequences. AUD can range from mild to severe,\* and recovery is possible regardless of severity.

### Liver Damage

Women who regularly misuse alcohol are more likely than men who drink the same amount to develop alcoholic hepatitis, a potentially fatal alcohol-related liver condition.<sup>5</sup> This pattern of drinking can also lead to cirrhosis (permanent liver scarring).

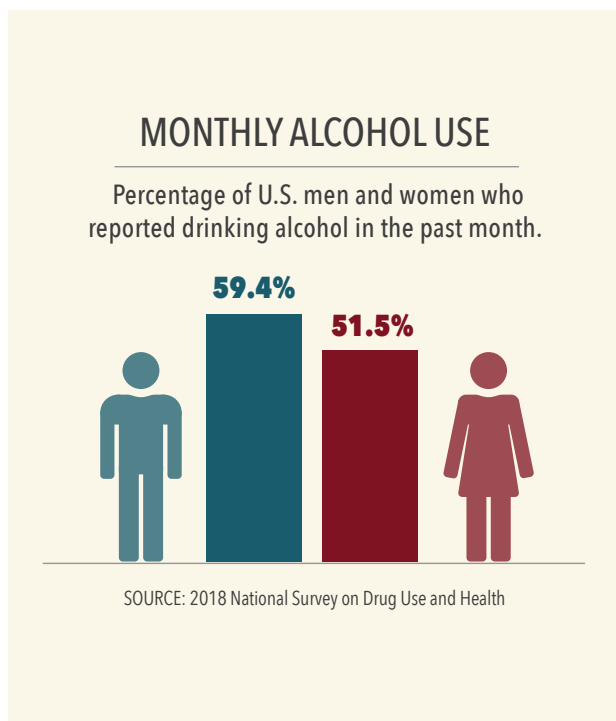
### Heart Disease

Long-term alcohol misuse is a leading cause of heart disease. Women are more susceptible to alcohol-related heart disease than men, even though they may consume less alcohol over their lifetime than men.<sup>3</sup>

\* To be diagnosed with AUD, a person must meet certain diagnostic criteria outlined in the *Diagnostic and Statistical Manual of Mental Disorders*, 5th edition. (See <https://pubs.niaaa.nih.gov/publications/dsmfactsheet/DSMfact.pdf>.)

## Brain Damage

Research suggests that alcohol misuse produces brain damage more quickly in women than in men.<sup>6</sup> In addition, a growing body of evidence shows that alcohol can disrupt normal brain development during the adolescent years, and there may be differences in the impact of alcohol on the brains of teen girls and boys who drink.<sup>7</sup> For example, in one study, teen girls who reported binge drinking, but not teen boys who reported binge drinking, showed less brain activity and worse performance on a memory test than peers who drank lightly or abstained.<sup>8</sup> Similarly, teenage girls who drank heavily showed a greater reduction in the size of important brain areas involved in memory and decision-making than teenage boys who engaged in heavy drinking.<sup>9</sup> Women also may be more susceptible than men to alcohol-related blackouts, which are gaps in a person's memory for events that occurred while they were intoxicated. These gaps happen when a person drinks enough alcohol to temporarily block the transfer of memories from short-term to long-term storage—known as memory consolidation—in a brain area called the hippocampus.<sup>10</sup>



for preterm labor.

## Some women should avoid alcohol entirely, including:

- » Anyone who is pregnant or trying to conceive
- » Anyone younger than age 21

## Breast Cancer

There is an association between drinking alcohol and developing breast cancer. Studies demonstrate that women who consume about 1 drink per day have a 5 to 9 percent higher chance of developing breast cancer than women who do not drink at all.<sup>11–13</sup> That risk increases for every additional drink they have per day.

## Alcohol and Pregnancy

Any drinking during pregnancy can be harmful. Prenatal alcohol exposure can cause physical, cognitive, and behavioral problems in children, any of which can be components of fetal alcohol spectrum disorders (FASD). (See <https://pubs.niaaa.nih.gov/publications/FASDFactsheet/FASDfact.htm> for more information on fetal alcohol syndrome and FASD.) Drinking during pregnancy can also increase the risk

- » Anyone who takes medications that can interact negatively with alcohol, such as sedative drugs, sleeping pills, pain relievers, and anti-anxiety medications

**To see whether your pattern of alcohol use puts you at risk for AUD, please visit Rethinking Drinking at <https://www.rethinkingdrinking.niaaa.nih.gov>**

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